

## REMARKS

Claims 1-32 are pending in the present application. In the above amendments, claims 6, 7, 16, 18, 19 and 26, have been amended; and claim 14 has been canceled without prejudice.

Applicants respectfully respond to this Office Action.

Claims 6 and 23 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Claim 6 has been amended to recite “measuring a next quality metric of the RAKE processed signals” and “comparing the first quality metric of the equalizer processed signals to the next quality metric of the RAKE processed signals.”

Claims 16 and 18 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. Claims 16 and 18 have been amended for clarification. Note a computer program product was held to be “a patented invention within the meaning of Title 35 § 101 . . .” in *Eolas Tech., Inc. v. Microsoft Corp.*, 73 U.S.P.Q.2d 1782, 1787, 399 F.3d 1325, 1330 (Fed.Cir.2005). For further support for Beauregard claims, please refer to *In re Beauregard*, 35 U.S.P.Q.2d (BNA) 1383, 53 F.3d 1583 (Fed.Cir.1995).

Claims 1-6, 15, and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Smee et al. (WO 02/09305) in view of Porter et al. (6,167,081) and Frank (US 2004/0042537).

Regarding claim 1, the Office Action states “Smee et al. do not explicitly teach comparing the first quality metric of the RAKE processed signals to a first threshold value, and when the first quality metric exceeds the first threshold value, enabling an equalizer.” It is asserted in the Office Action that this is disclosed by Porter et al. Applicants’ respectfully traverse this assertion. The section of Porter et al. cited in the Office Action cites Serizawa et al., disclosing “a third technique” for “selecting between an equalizing demodulator and a non-equalizing demodulator within a receiver.” This technique involves “using a matched filter to generate a signal which is compared to a threshold...[i]f multipath is present, the system selects the equalizing demodulator bitstream while if multipath is not present, the system selects the non-equalizing demodulator bitstream” (col. 2, lines 46-51 as cited in the Office Action). FIG. 16 of Serizawa discloses a demodulator 204 without an adaptive equalizer and a demodulator 202 with an adaptive demodulator. Both demodulators *are in continuous operation* (col. 2, lines

54-60 of Porter) until the output of the matched filter 208 through multipath detection unit 210 determines which demodulation bitstream to use for the receiver.

In contrast, in Applicants' claim 1, operation starts in a RAKE only mode. While in the RAKE only mode, operation is maintained until there is a change in operating conditions sufficient to indicate performance increases would be achieved with the *addition of the equalizer*. In other words, when the first quality metric of the RAKE processed signals exceed the first threshold value, the equalizer is enabled. Support may be found in Applicants' description, paragraph [0065] and FIG. 5. This is not disclosed by Porter et al. For at least these reasons, claim 1, and by analogy claims 15-16 are allowable over the cited references. Claims 2-6 depend on claim 1 and are allowable for at least the same reasons as claim 1.

Claims 7-13, 17, and 19 were rejected under 35 U.S.C. 102(b) as being anticipated by Smee et al. (WO 02/09305). Claim 7 has been amended to recite "by initiating a test mode once in a sample period" and "wherein the sample period is sufficient to allow data to traverse the filter elements of the equalizer." Applicants respectfully assert that claim 7 as amended is now in condition for allowance. Claims 8-13 depend from amended claim 7 and are also now in condition for allowance. Claim 17 has been similarly amended and should also be in condition for allowance.

Claim 18 was rejected under 35 U.S.C. 103(a) as being unpatentable over Smee et al. (WO 02/09305) in view of Porter et al. (6, 167,081). Claim 18 has been amended to recite "when a test mode is initiated once in a sample period." Applicants respectfully assert that claim 18 as amended is now in condition for allowance.

Claim 19 was rejected under 35 U.S.C. 102(b) as being unpatentable over Ma et al. (US 2002/0060999). Claim 19 has been amended to recite "a RAKE receiver in a first signal processing path, the RAKE receiver adapted to receive a signal and generate an estimate of the received signal" and "an equalizer in a second processing path, operably connected in parallel to the RAKE receiver." Applicants respectfully assert that claim 18 as amended is now in condition for allowance.

Claim 20 was rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (US 2002/0060999) in view of Porter et al. (6,167,081). Claim 20 includes all the limitations of amended claim 19 and is allowable for at least the same reasons as claim 19. Further, the Office

Action asserts that Porter et al. disclose the controller enables the equalizer when a channel quality measure of the estimate (i.e. BER) is above a threshold. However, the cited reference fails to disclose the controller enables the equalizer when a channel quality measure of *the estimate from the RAKE receiver* is above a threshold. In Porter, the output control selector 50 receives the baseband signal from line 44 *prior* to demodulation. Thus, claim 20 is allowable over cited references Ma et al. and Porter et al.

Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (US 2002/0060999) in view of Porter et al. (6,167,081) as applied to claim 20 above, and further in view of Smee et al. (WO 02/09305). Applicants respectfully assert that claims 21 and 22 are allowable for at least the same reasons as claims 19 and 20 above.

Claims 23-25, 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (US 2002/0060999) in view of Smee et al. (WO 02/09305). Applicants respectfully assert that claims 23-25 and 30-32 are allowable for at least the same reasons as amended claim 19 above.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (US 2002/0060999) in view of Smee et al. (WO 02/09305) and further in view of Frank (2004/0042537). Applicants respectfully assert that claim 26 is allowable for at least the same reasons as claim 19 above.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (US 2002/0060999) in view of Cheng-Quispe et al. (Re. 33,380). Applicants respectfully assert that claim 26 is allowable for at least the same reasons as claim 19 above.

Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (US 2002/0060999) in view of Cheng-Quispe et al. (Re. 33,380) and further in view of Smee et al. (WO 02/09305). Applicants respectfully assert that claim 26 is allowable for at least the same reasons as claim 19 above.

### Specification

Applicants provide herewith amendments to the specification. The amendments to the specification are made by presenting marked up replacement paragraphs which identify changes made relative to the immediate prior version.

The changes made are primarily typographical or grammatical in nature, or involve minor clarifications of awkward wordings.

Applicants believe these changes add no new matter to the application and are fully supported by the original disclosure.

**REQUEST FOR ALLOWANCE**

In view of the foregoing, Applicants submit that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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